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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,700	08/05/2003	A-Jung Kim	5000-1-438	7551
33942	7590	10/19/2007		
CHA & REITER, LLC 210 ROUTE 4 EAST STE 103 PARAMUS, NJ 07652			EXAMINER WILLIAMS, JEFFERY L	
			ART UNIT 2137	PAPER NUMBER
			MAIL DATE 10/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/634,700

Applicant(s)

KIM ET AL.

Examiner

Jeffery Williams

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

Claims 1 – 5 are pending.

All objections and rejections not set forth below have been withdrawn.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/6/07 has been entered.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification fails to provide proper antecedent basis for the recitations of "a plurality of entities...including a quantity of classes provided according to a total number of SIDs controlled by the single ONU".

Claim Objections

Claim 1 is objected to because of the following informalities: the descriptive recitation of "a plurality of entities...including a quantity of classes provided according to a total number of SIDs controlled by the single ONU", though while non-limiting within the scope of a claim limitation for creating a frame comprising an ONU field, appears to be nonsensical. Furthermore, the meaning of this language is not revealed through a consideration of the applicant's disclosure. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 – 5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has not adequately pointed out where the amended claim is supported, nor does there appear to be a written description of the claim recitation in the application as filed. Namely, the

specification fails to disclose "a plurality of entities...including a quantity of classes provided according to a total number of SIDs controlled by the single ONU".

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 – 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "*a data field for encrypting the security data, a key information field for storing key information used for decrypting the encrypted data of the data field*" in lines 3 - 7. There is insufficient antecedent basis for the recitation of "*the encrypted data of the data field*" within this claim. For the purpose of examination, the examiner presumes the applicant to recite "*a data field having encrypted data, a key information field for storing key information used for decrypting the encrypted data of the data field*".

Claims 2 – 5 are rejected by virtue of dependency.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sala et al. (Sala), "Filtering and Forwarding Frames Within an Optical Network", U.S. Patent Publication 2003/0117998 in view of Rothenberg, "Method and Apparatus for Secure Data Transmission", U.S. Patent 5,432,850.

Regarding claim 1 Sala discloses:
a security frame having an ONU ID field for indicating ONU ID information identified by an ONU with the destination user and a user ID field for indicating a security ID identified by the destination user (Sala, par. 9-12, 61), wherein the ONU ID field includes a group ID bit field, a logical link ID field and a security ID field, said ONU ID field configured to provide a virtual group ID for a plurality of entities controlled by a single ONU, including a quantity of classes provided according to a total number of SIDs controlled by the single ONU (Sala, par. 9-12, 67, 69, 74, 76, 79, 81, 88, 94-95); and b) transmitting the transmission frame (Sala, par. 82-83).

Sala does not appear to explicitly recite creating a transmission frame comprised of a data field for encrypting the security data and a key information field for storing key information used for decrypting the encrypted data of the data field.

1 Rothenberg teaches *creating a transmission frame comprised of a data field for*
2 *encrypting the security data and a key information field for storing key information used*
3 *for decrypting the encrypted data of the data field* (Rothenberg, 3:37-57).

4 It would have been obvious to one of ordinary skill in the art to employ the
5 security methods of Rothenberg, namely secure data transmission utilizing data
6 encryption and a key to enhance security, with the system of Sala. This would have
7 been obvious because one of ordinary skill in the art would have been motivated by the
8 advantages of secure data transmission.

9
10 Regarding claim 2, the combination enables:
11 *wherein the security frame further includes a designator field for storing*
12 *information of a group of the ONUs and the users* (Sala, par. 58).

13
14 Regarding claim 3, the combination enables:
15 *wherein the security frame further includes a MDF (Management Defined Field)*
16 *for storing MIB (Management Information Base) information and associated protocol*
17 *information* (Sala, par. 58).

18
19 Regarding claim 4, the combination enables:
20 *c) transmitting the transmission frame to the users connected to the ONUs for*
21 *identifying the ONU ID field contained in the security frame of the transmitted frame*
22 (Sala, par. 82-83).

Regarding claim 5, the combination enables:

selecting at least one user who can identify contents of the ONU ID field contained in the security frame from among the plurality of users connected to the ONUs for identifying the ONU ID field, and transmitting the transmission frame to the selected user (Sala, par. 52-53).

Response to Arguments

Applicant's arguments filed 8/6/07 have been fully considered but they are not persuasive.

Applicant argues or asserts primarily that:

(i) Claim 1 has been amended to include the recitation, that the ONU ID field is configured to provide a virtual group ID for a plurality of entities controlled by a single ONU, including a quantity of classes provided according to a total number of SIDs controlled by the single ONU.

Applicant respectfully submits that the combination, of Sala and Rothenberg fails to disclose or suggest at least the foregoing recitation of claim 1. (Remarks, pg. 4, 5)

1 In response, the examiner respectfully notes that the recited claim language
2 comprising claim limitations – specifically, creating a security frame comprising an ONU.
3 ID field – is anticipated by the prior art. See Sala, par. 9-12, 61.

4 Regarding applicant's argument respecting intended use ("to provide a ..."), it is
5 respectfully noted that a recitation of the intended use of the claimed invention must
6 result in a structural difference between the claimed invention and the prior art in order
7 to patentably distinguish the claimed invention from the prior art. If the prior art
8 structure (i.e. a data field, "ONU ID field") is capable of performing the intended use,
9 then it meets the claim.

10
11 ***Conclusion***

12
13 The prior art made of record and not relied upon is considered pertinent to
14 applicant's disclosure:

15 ***See Notice of References Cited.***

16
17 A shortened statutory period for reply is set to expire 3 months (not less than 90
18 days) from the mailing date of this communication.

19 Any inquiry concerning this communication or earlier communications from the
20 examiner should be directed to Jeffery Williams whose telephone number is (571) 272-
21 7965. The examiner can normally be reached on 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JW
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EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER